

FIG. 1

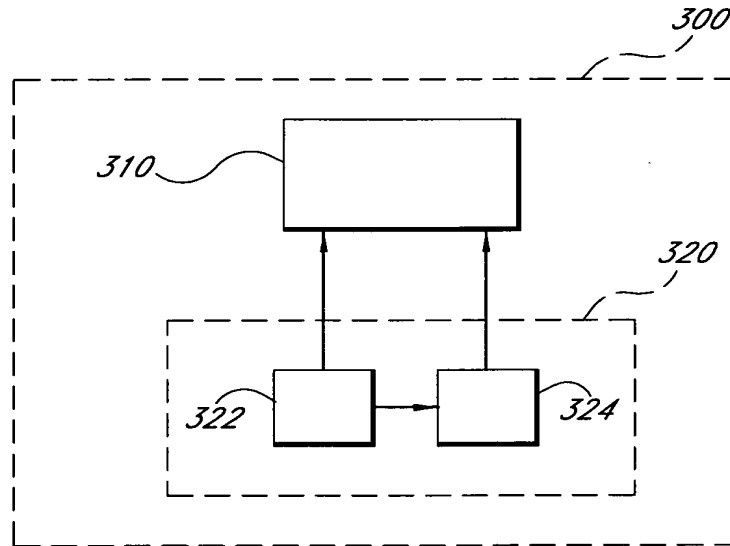


FIG. 2

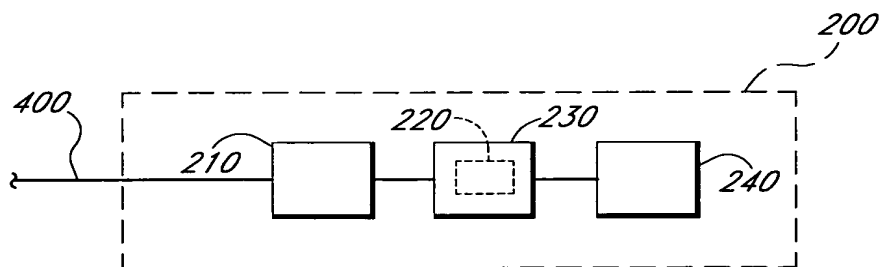


FIG. 3A

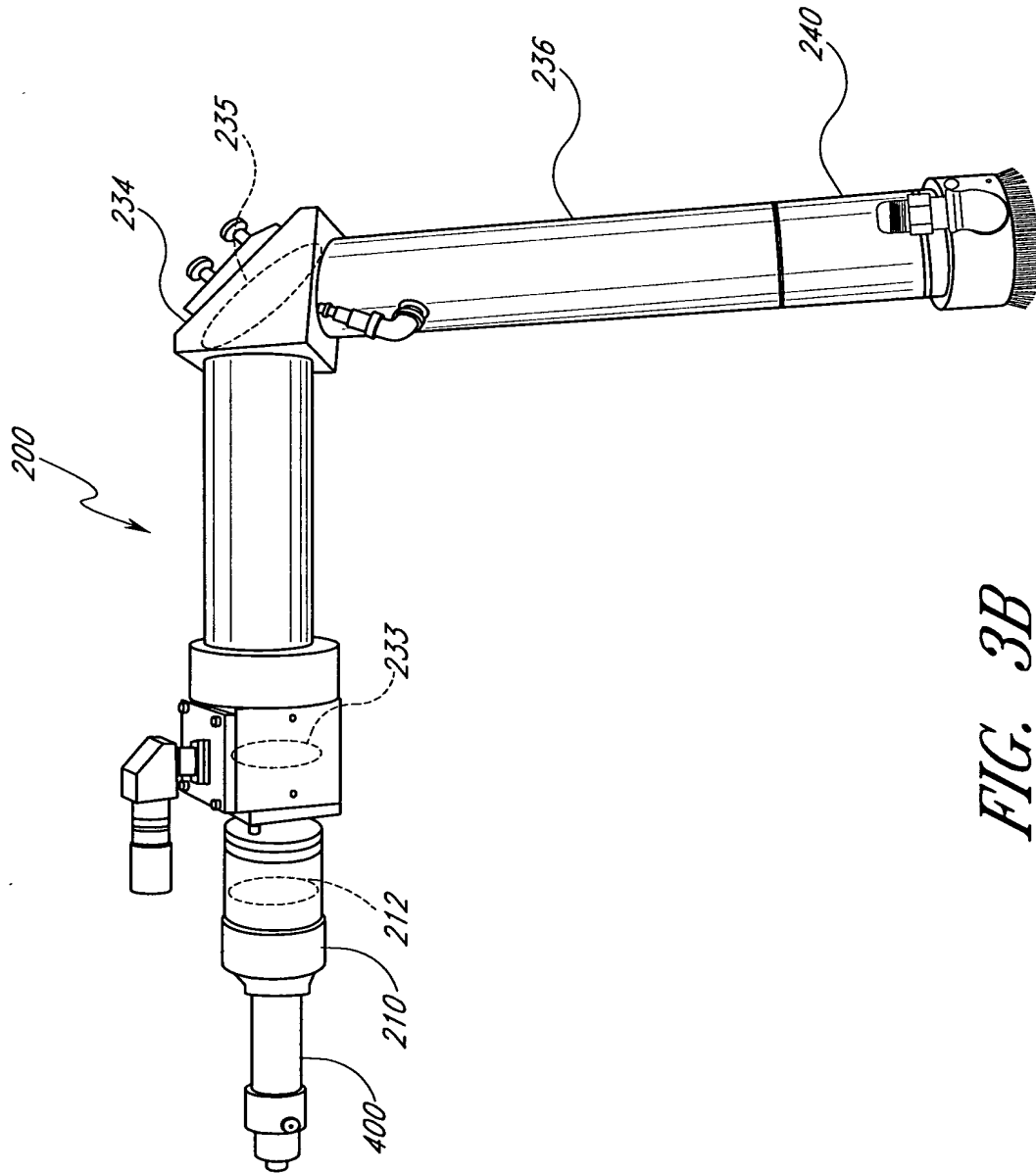


FIG. 3B

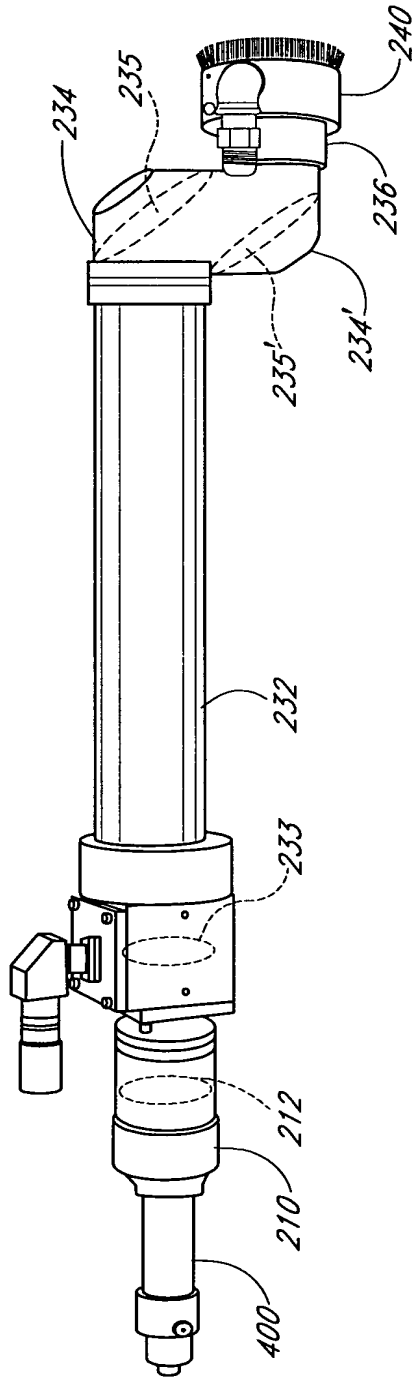


FIG. 3C

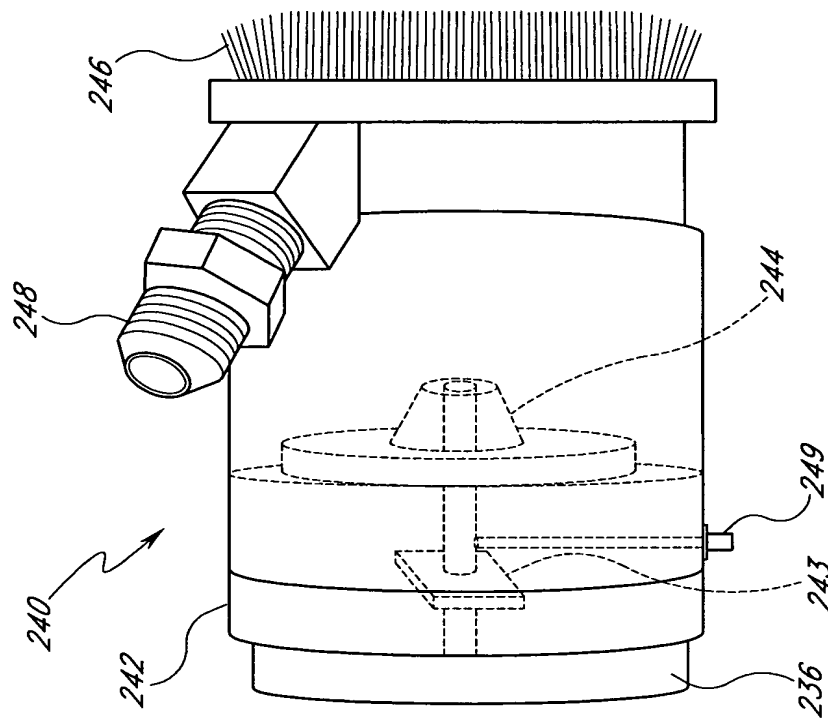


FIG. 4

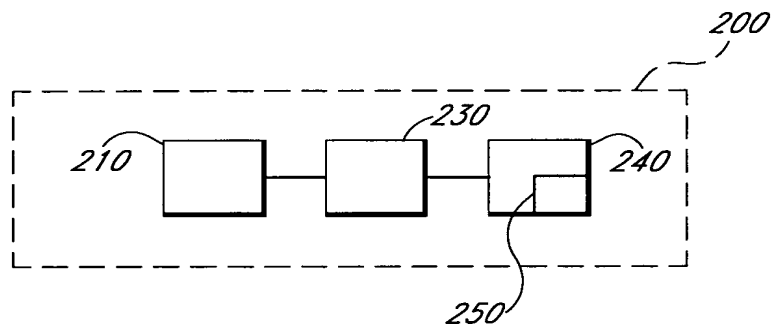


FIG. 5

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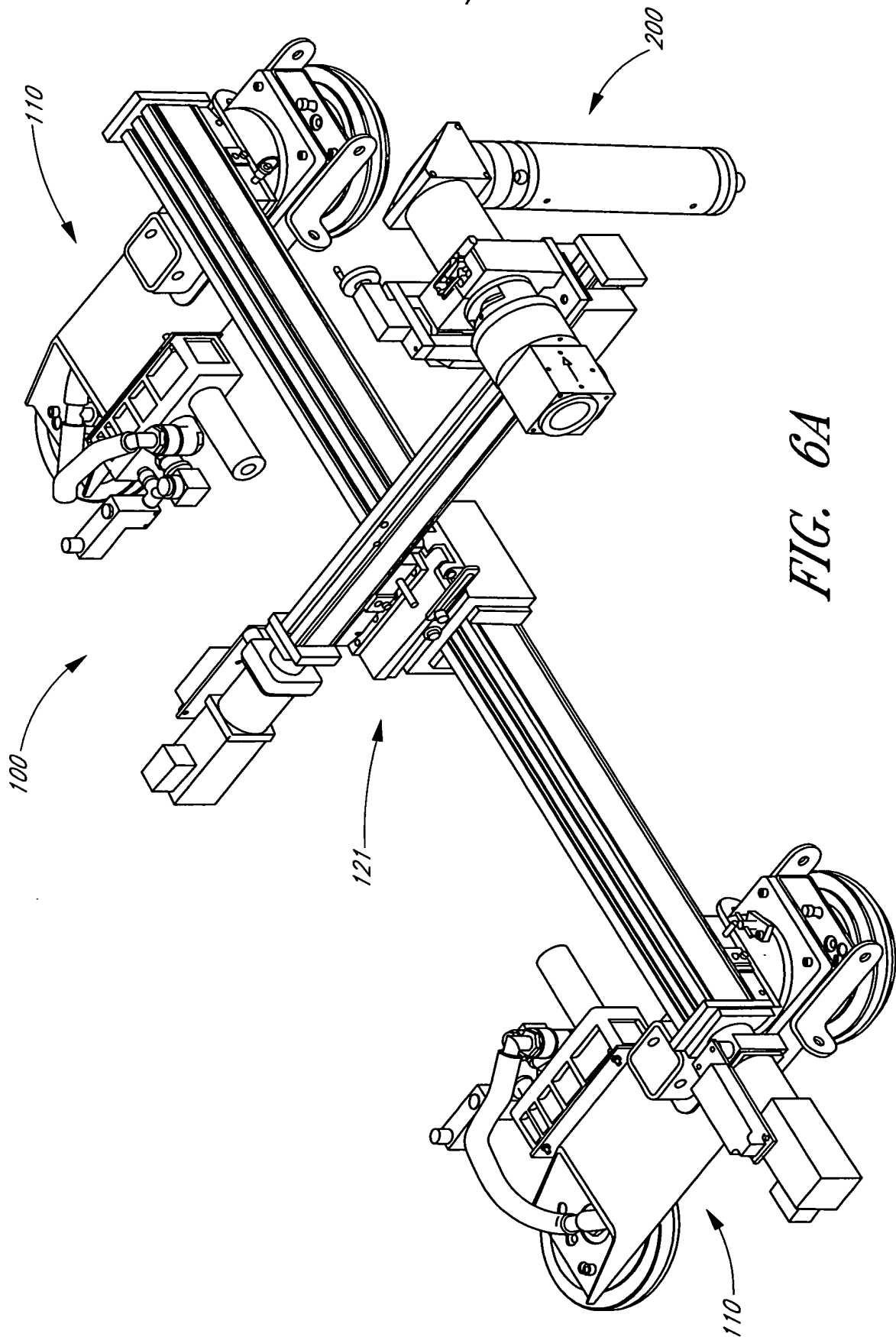


FIG. 6A

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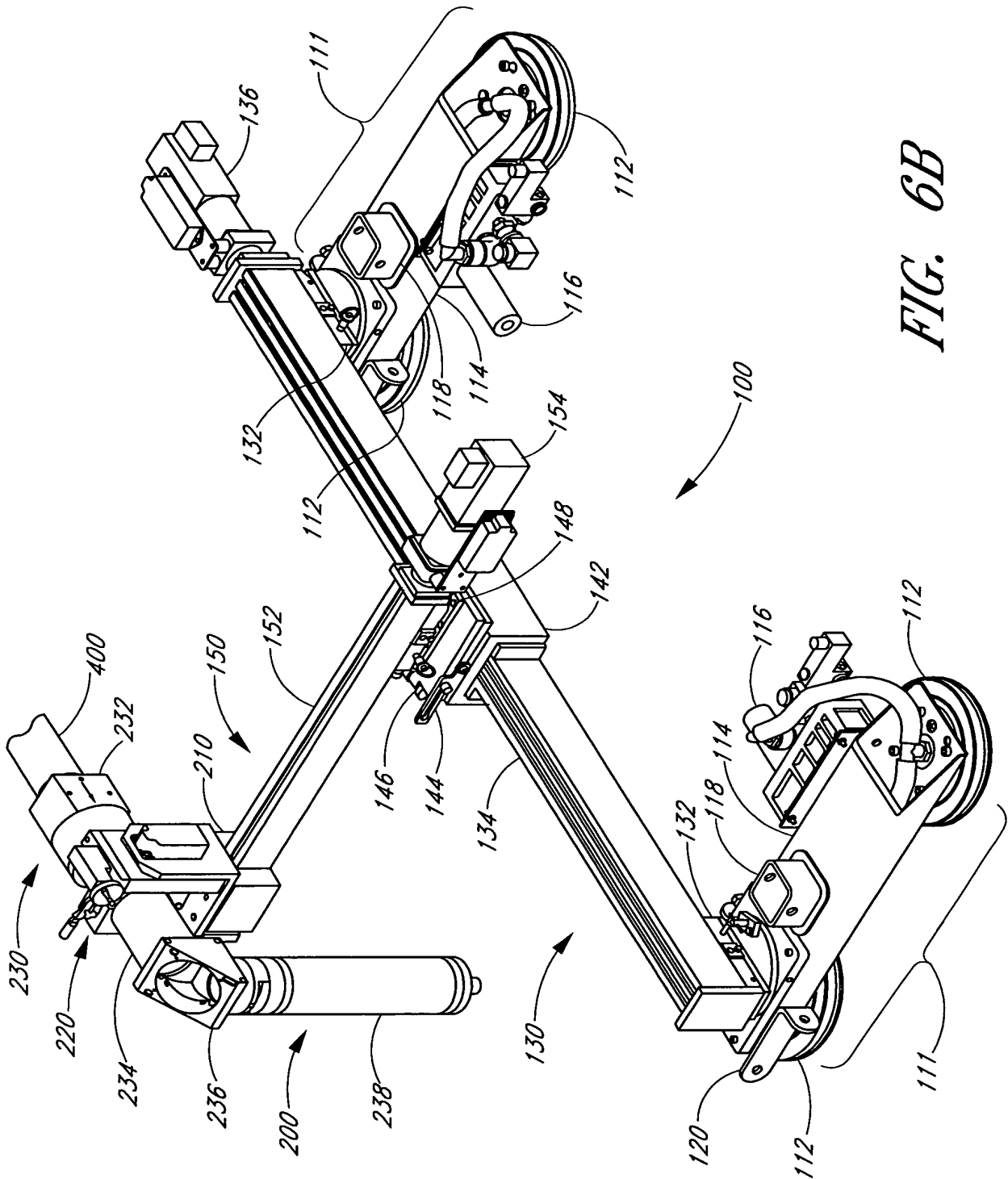


FIG. 6B

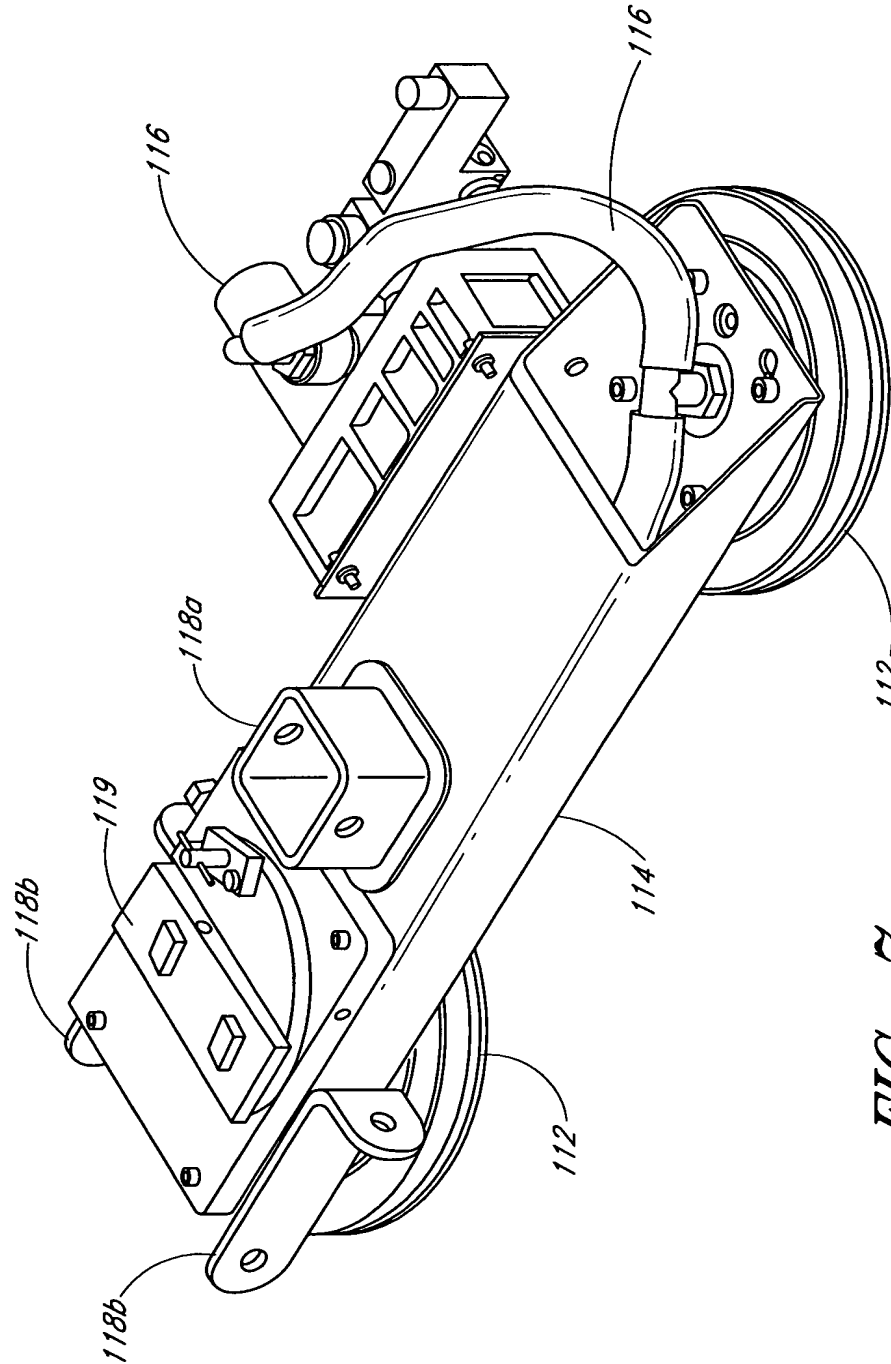
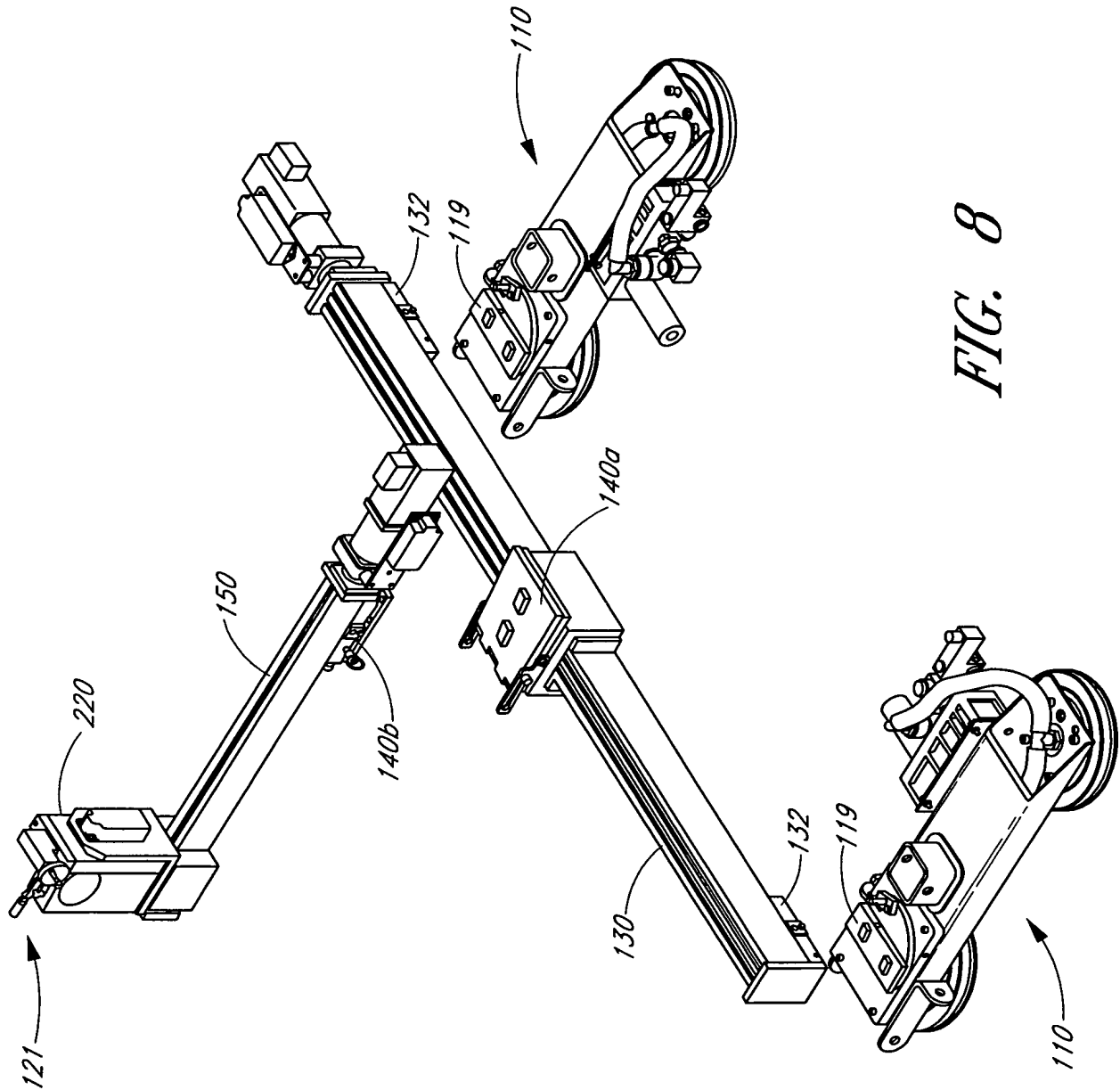


FIG. 7



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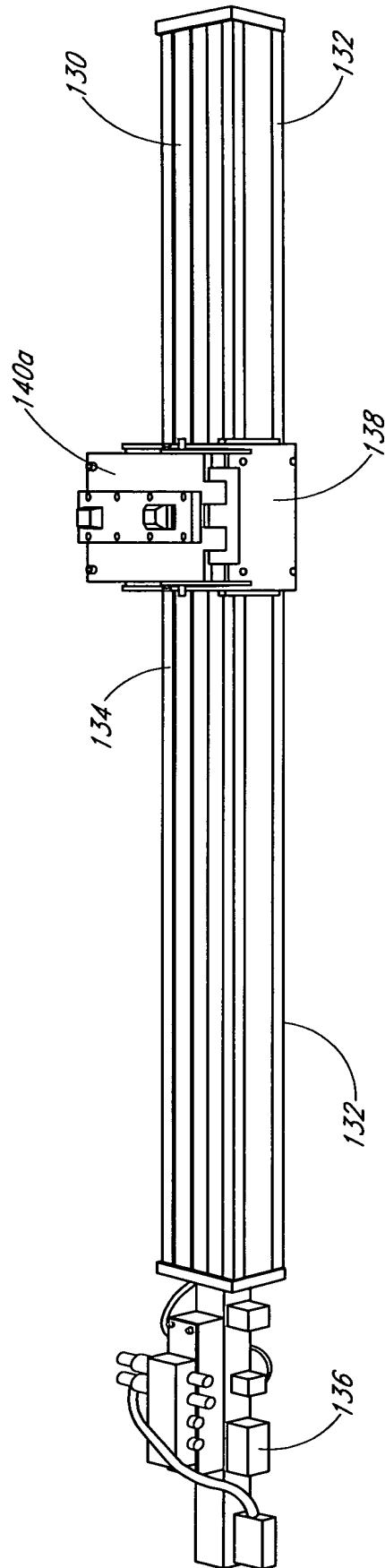


FIG. 9

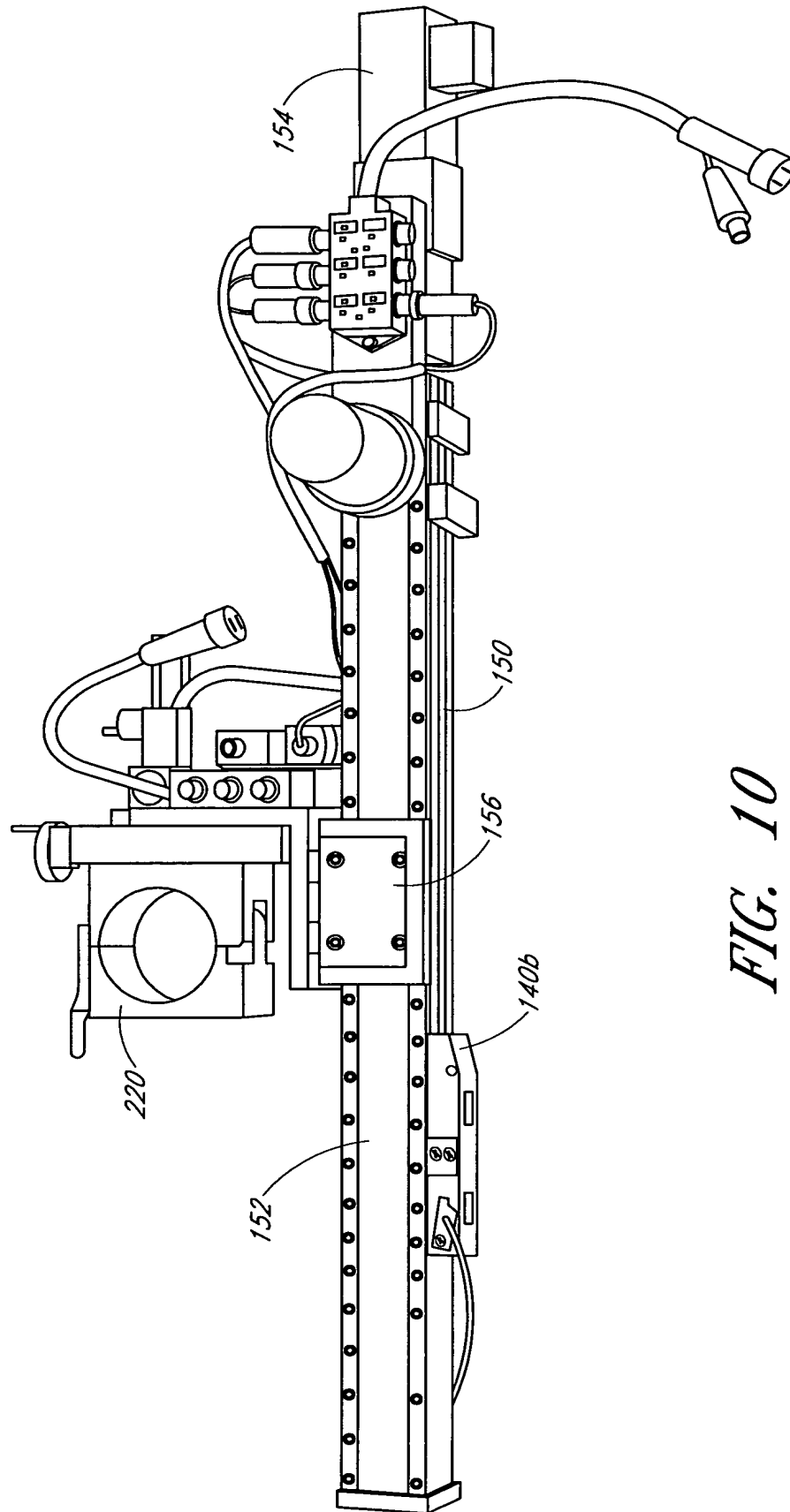


FIG. 10

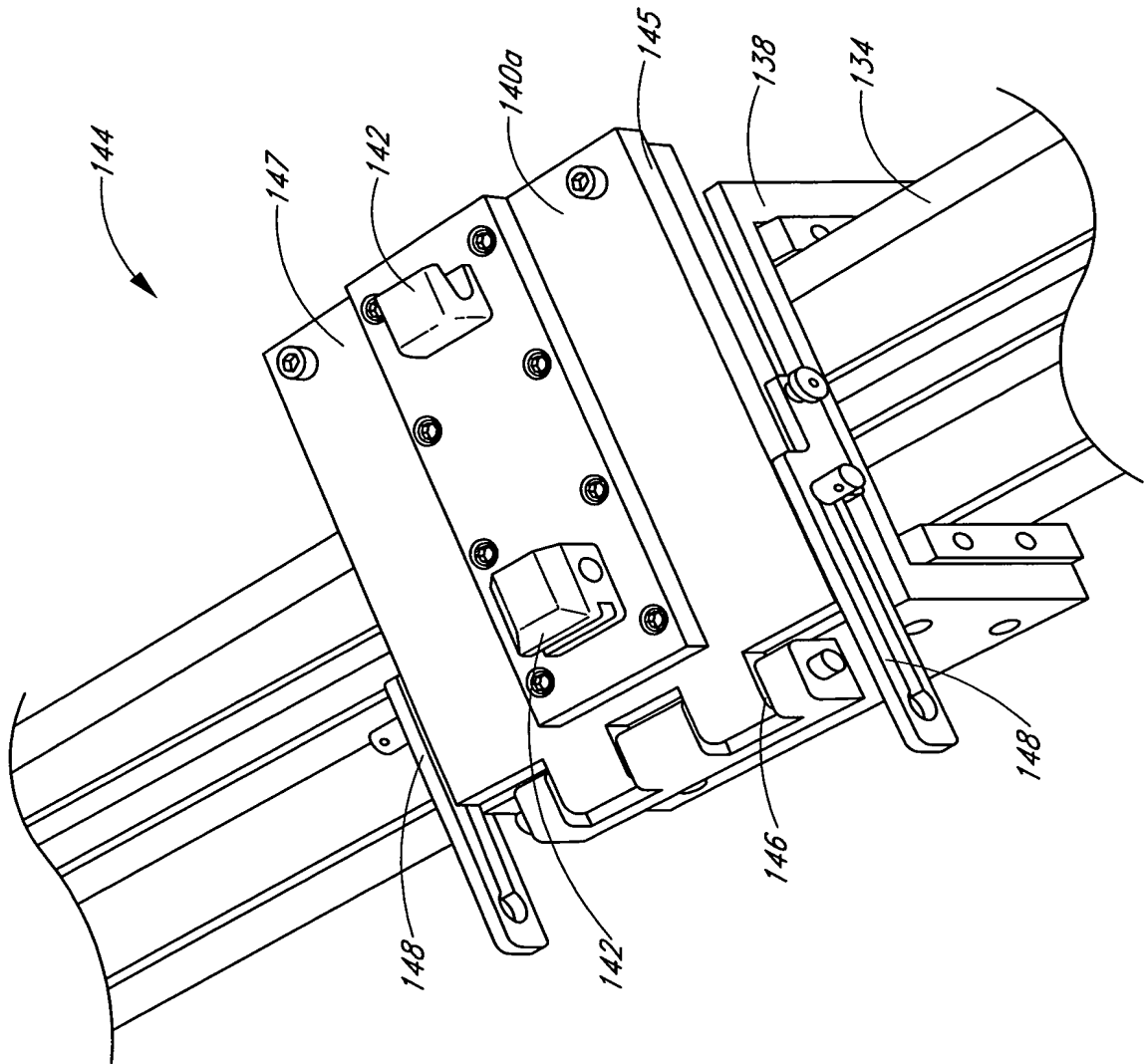
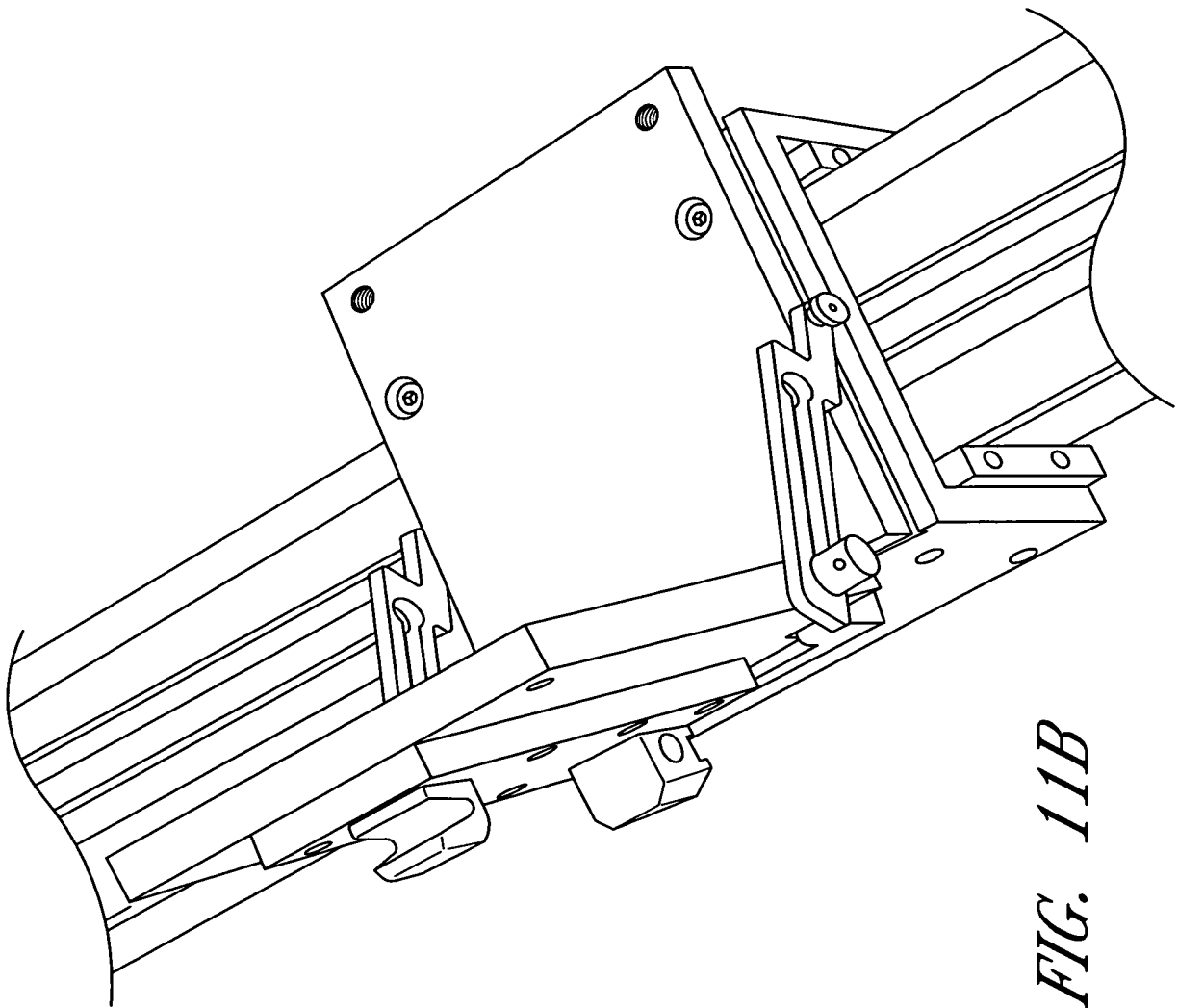


FIG. 11A



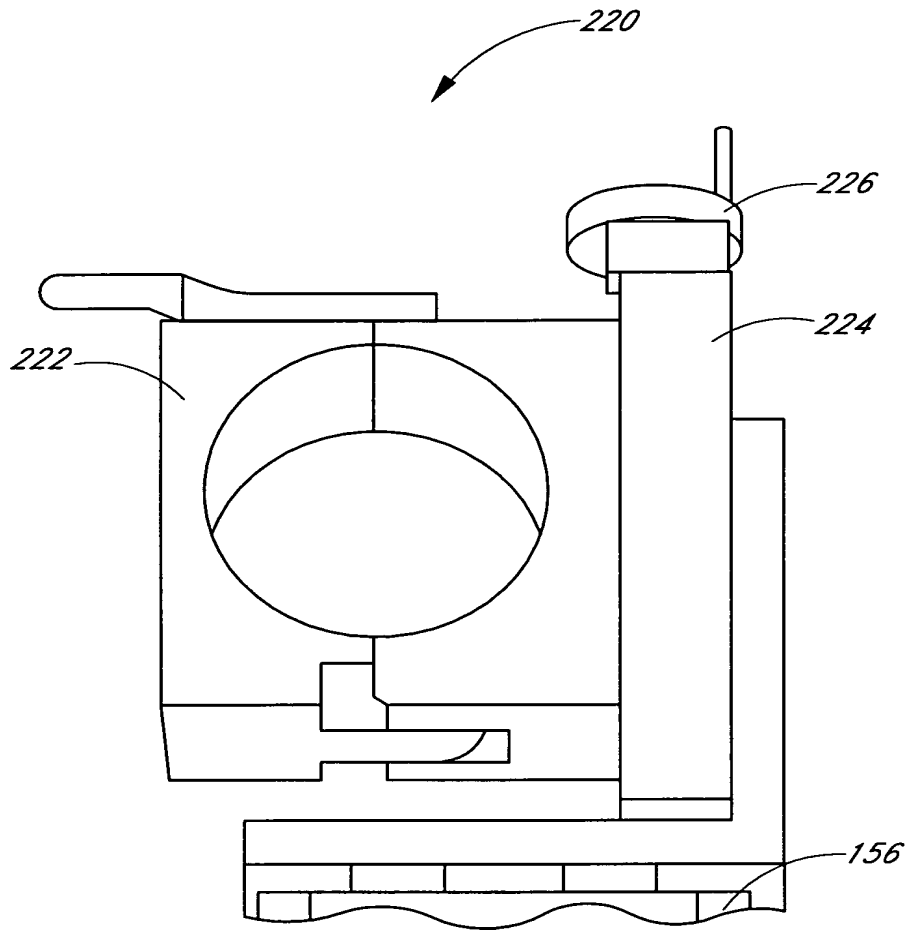
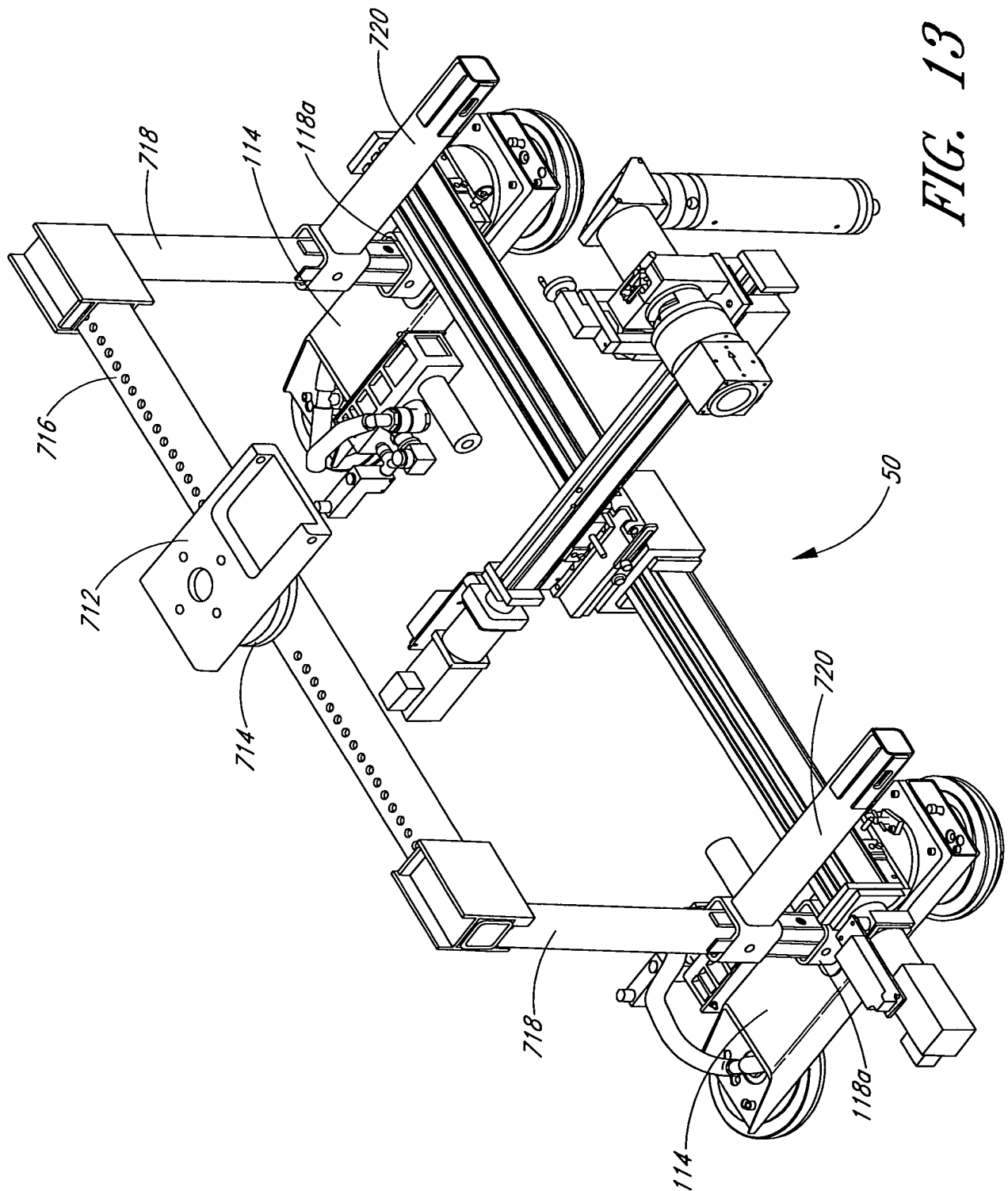


FIG. 12



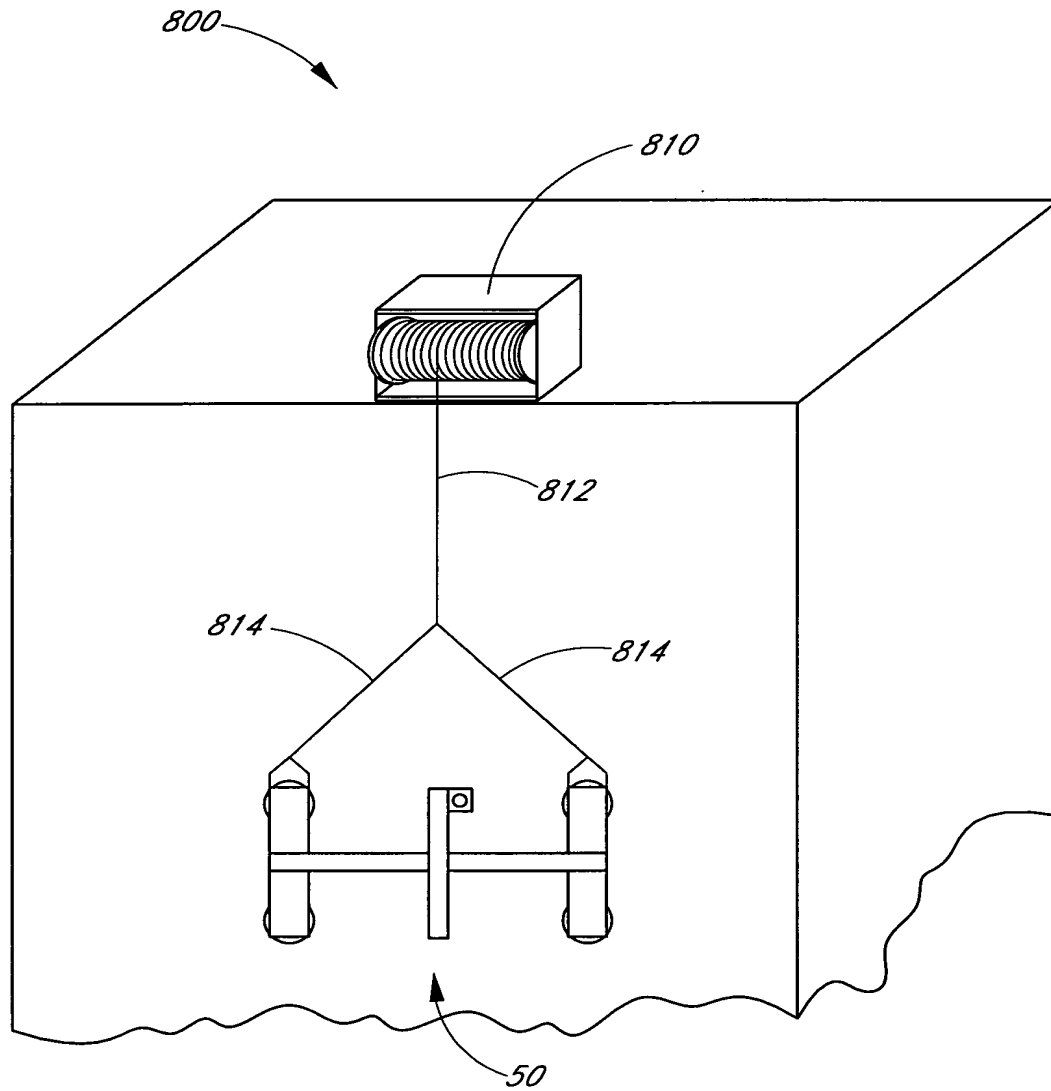


FIG. 14A

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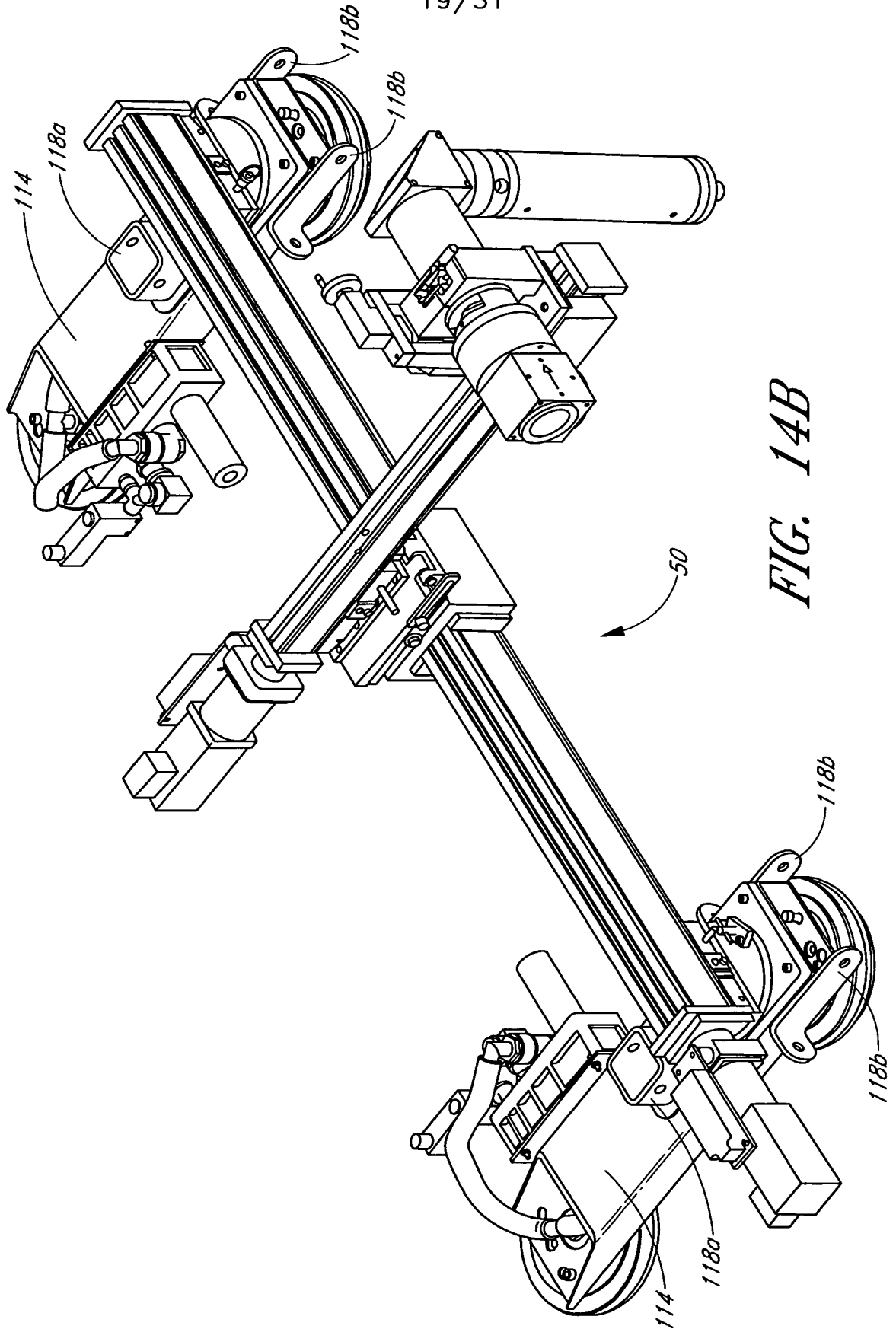


FIG. 14B

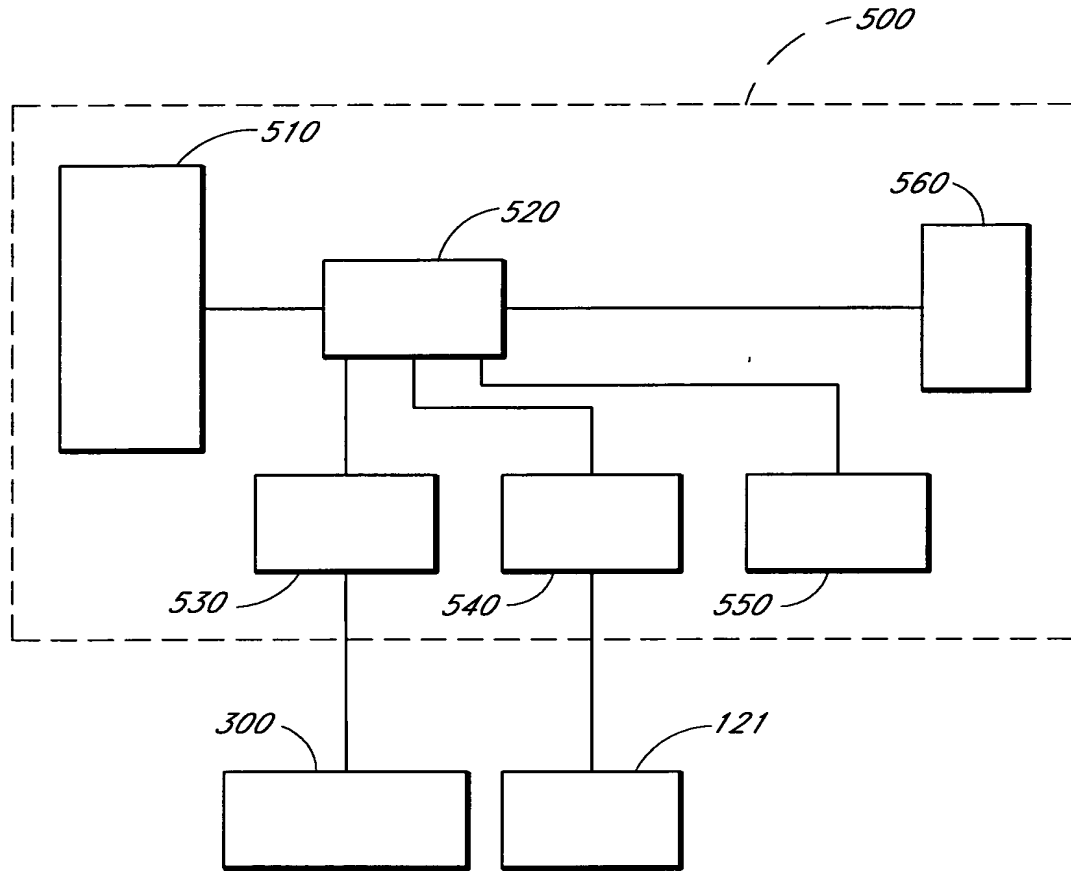


FIG. 15

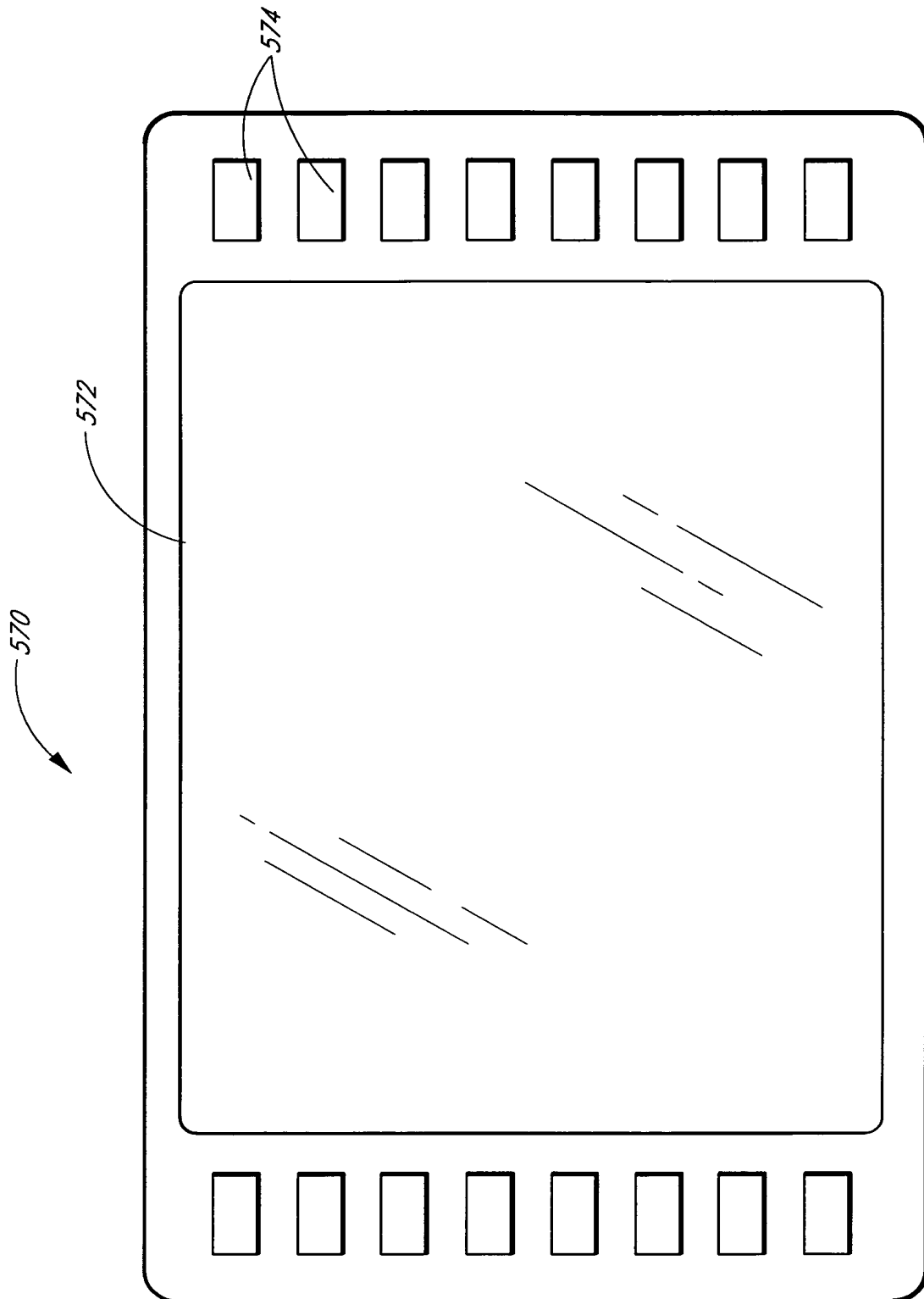


FIG. 16

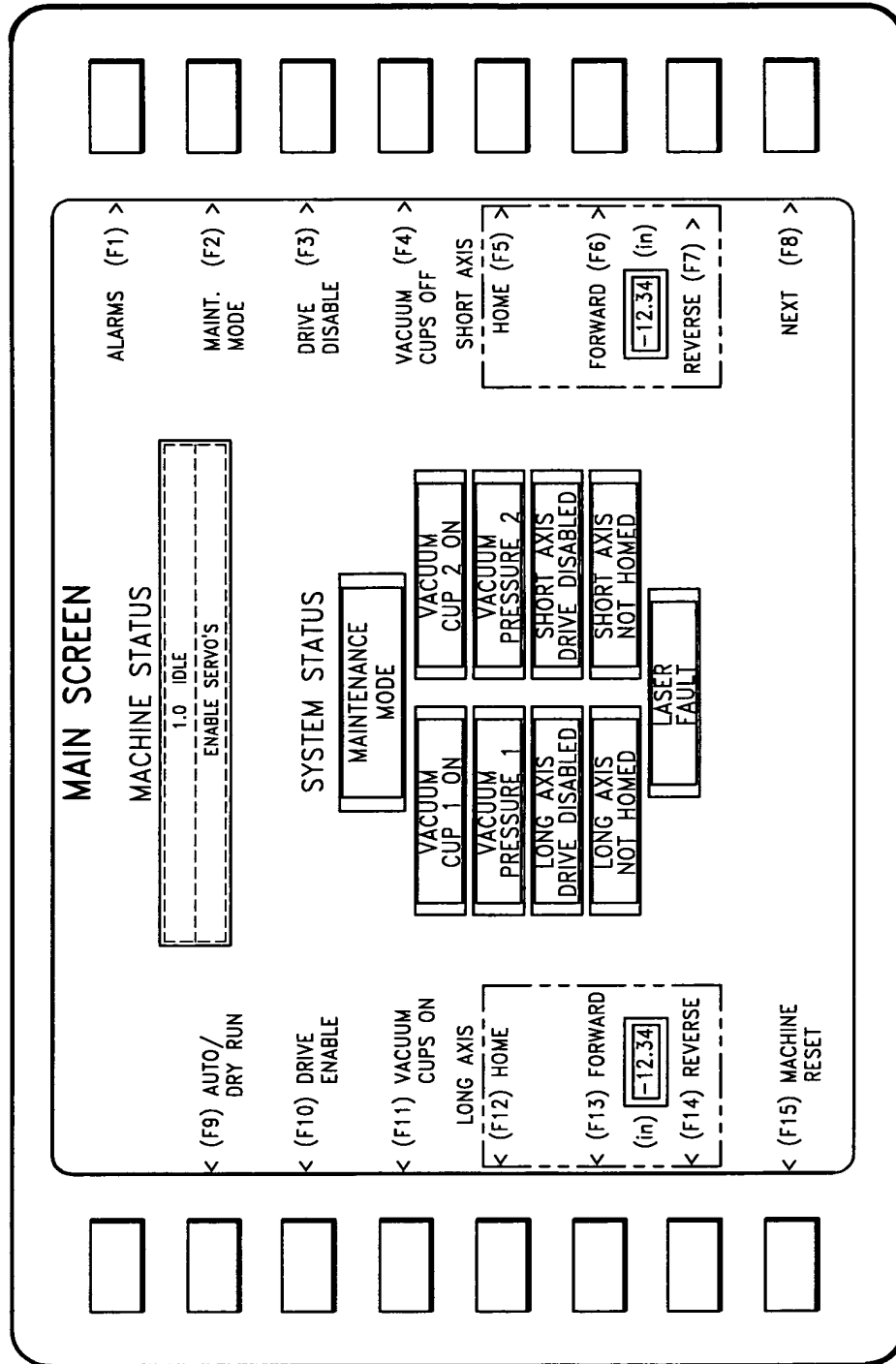


FIG. 17A

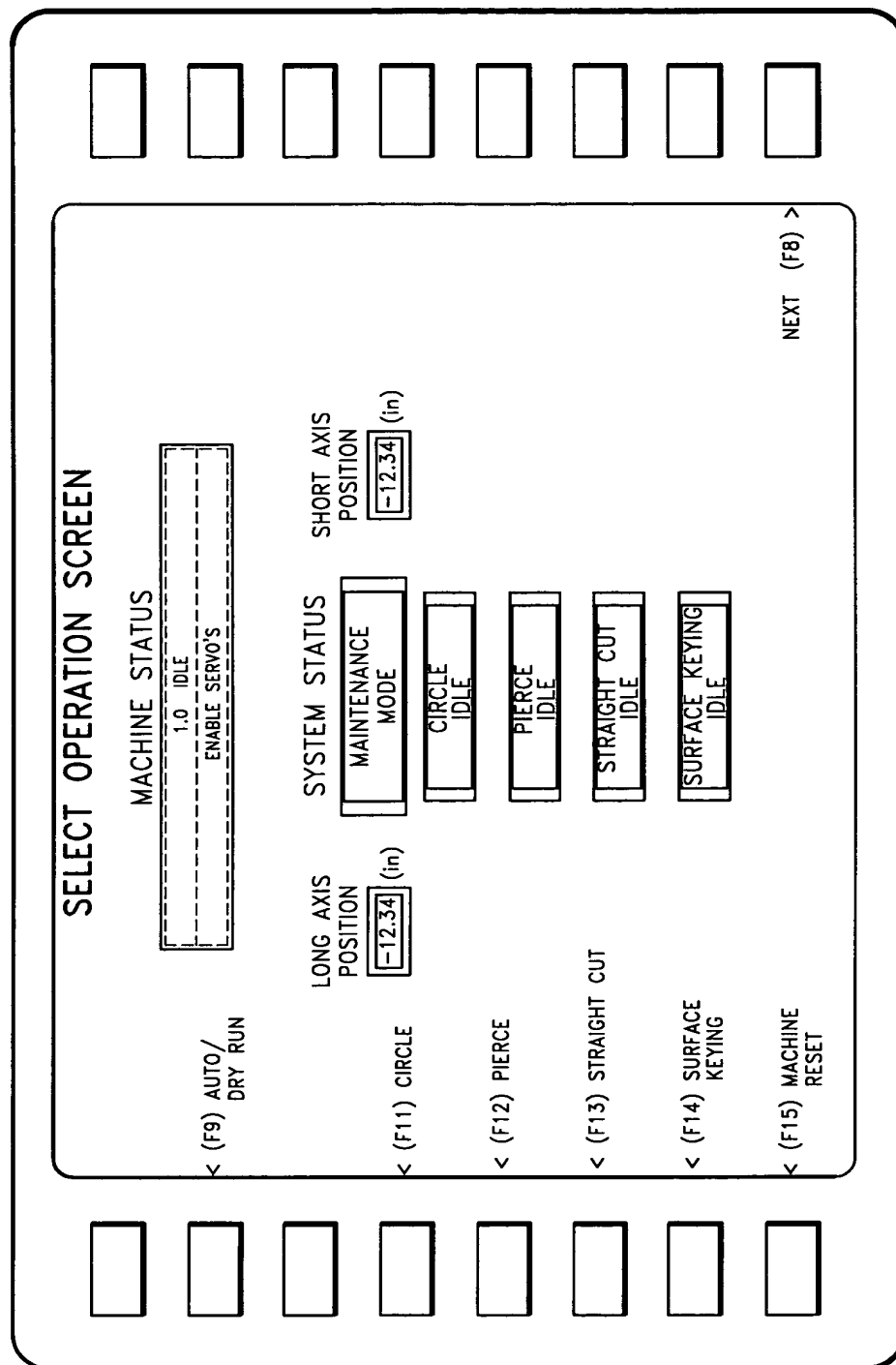


FIG. 17B

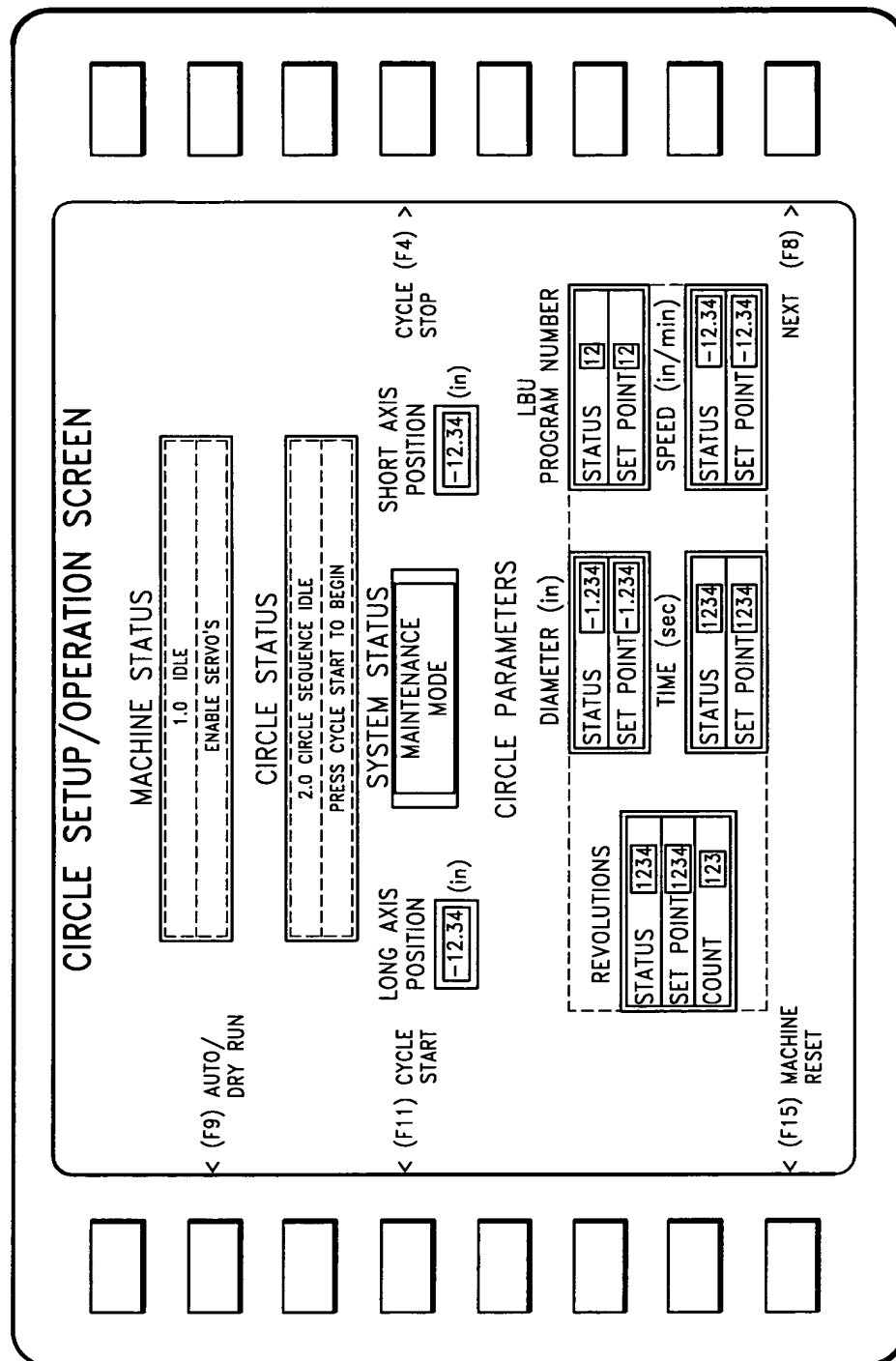


FIG. 17C

PIERCE SETUP/OPERATION SCREEN

MACHINE STATUS

1.0 IDLE

ENABLE SERVO'S

PIERCE STATUS

3.0 PIERCE SEQUENCE IDLE

PRESS CYCLE START TO BEGIN

SYSTEM STATUS

LONG AXIS POSITION

-12.34 (in)

SHORT AXIS POSITION

-12.34 (in)

PIERCE PARAMETERS

TIME (sec)

STATUS 1234

SET POINT

1234

PROGRAM NUMBER

STATUS 12

SET POINT

12

PIERCE STATUS

MAINTENANCE MODE

PIERCE STATUS

MAINTENANCE MODE

LONG AXIS POSITION

-12.34 (in)

SHORT AXIS POSITION

-12.34 (in)

TIME (sec)

STATUS 1234

SET POINT

1234

PROGRAM NUMBER

STATUS 12

SET POINT

12

LONG AXIS POSITION

-12.34 (in)

SHORT AXIS POSITION

-12.34 (in)

TIME (sec)

STATUS 1234

SET POINT

1234

PROGRAM NUMBER

STATUS 12

SET POINT

12

LONG AXIS POSITION

-12.34 (in)

SHORT AXIS POSITION

-12.34 (in)

TIME (sec)

STATUS 1234

SET POINT

1234

PROGRAM NUMBER

STATUS 12

SET POINT

12

LONG AXIS POSITION

-12.34 (in)

SHORT AXIS POSITION

-12.34 (in)

TIME (sec)

STATUS 1234

SET POINT

1234

PROGRAM NUMBER

STATUS 12

SET POINT

12

LONG AXIS POSITION

-12.34 (in)

SHORT AXIS POSITION

-12.34 (in)

TIME (sec)

STATUS 1234

SET POINT

1234

PROGRAM NUMBER

STATUS 12

SET POINT

12

LONG AXIS POSITION

-12.34 (in)

SHORT AXIS POSITION

-12.34 (in)

TIME (sec)

STATUS 1234

FIG. 17D

1.0 IDLE

ENABLE SERVO'S

4.0 CUT SEQUENCE IDLE

PRESS CYCLE START TO BEGIN

MAINTENANCE

MODE

STATUS

SET POINT

STATUS

SET POINT

STATUS

SET POINT

STATUS

SET POINT

STATUS

SET POINT

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SET POINT

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FIG. 17E

[illegible]

FIG. 17F

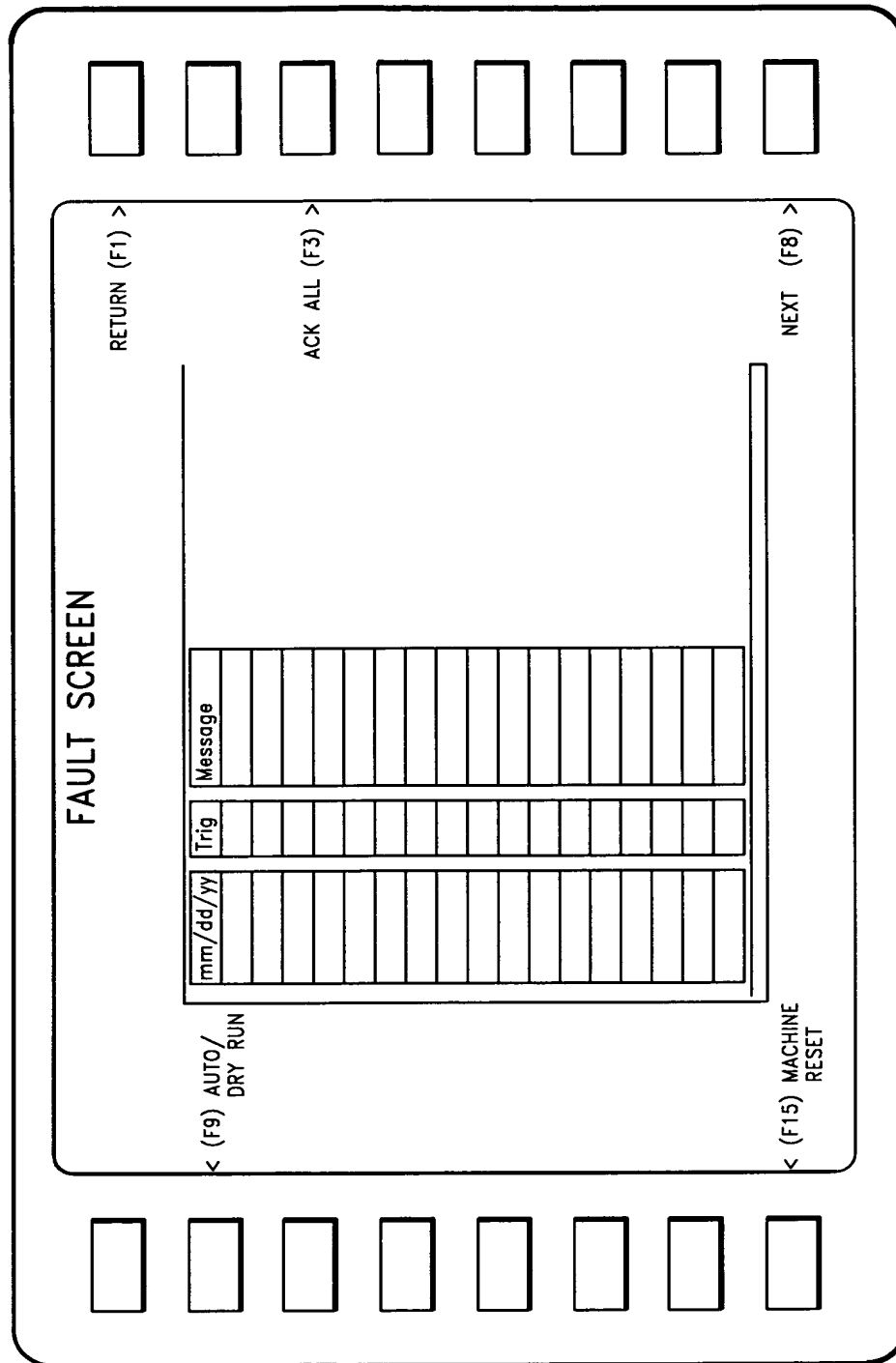


FIG. 17G.

MAINTENANCE SCREEN

WARNING:
OPERATION FROM THIS SCREEN
BYPASSES SYSTEM INTERLOCKS

SYSTEM STATUS

MAINTENANCE
MODE

VACUUM
CUP 1 ON

VACUUM
CUP 2 ON

VACUUM
PRESSURE 1

VACUUM
PRESSURE 2

LONG AXIS
DRIVE DISABLED

SHORT AXIS
DRIVE DISABLED

LASER AIR
SOLENOID OFF

LASER AIR
PRESSURE

LONG AXIS
NOT HOMED

SHORT AXIS
NOT HOMED

LASER
FAULT

JOG SPEED
(in/min)

STATUS -12.34

SET POINT -12.34

< (F9) AUTO/
DRY RUN

< (F10) DRIVE
ENABLE

< (F11) VACUUM
CUPS ON

LONG AXIS

< (F12) HOME

< (F13) FORWARD

(in) -12.34

< (F14) REVERSE

< (F15) MACHINE
RESET

ALARMS (F1) >

LASER AIR (F2) >
ON/OFF

DRIVE (F3) >
DISABLE

VACUUM (F4) >
CUPS OFF

SHORT AXIS

HOME (F5) >

FORWARD (F6) >

-12.34 (in)

REVERSE (F7) >

NEXT (F8) >

FIG. 17H

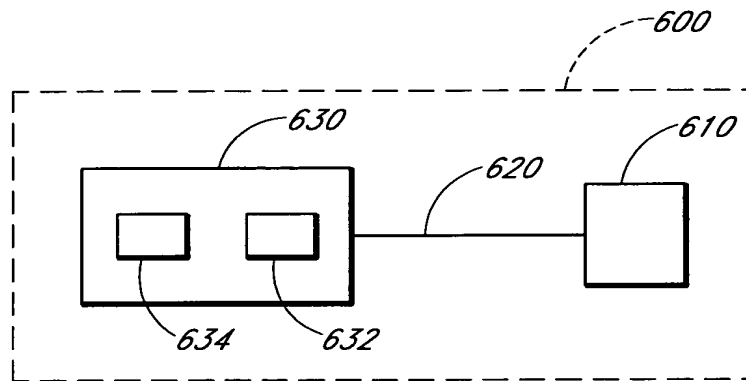


FIG. 18

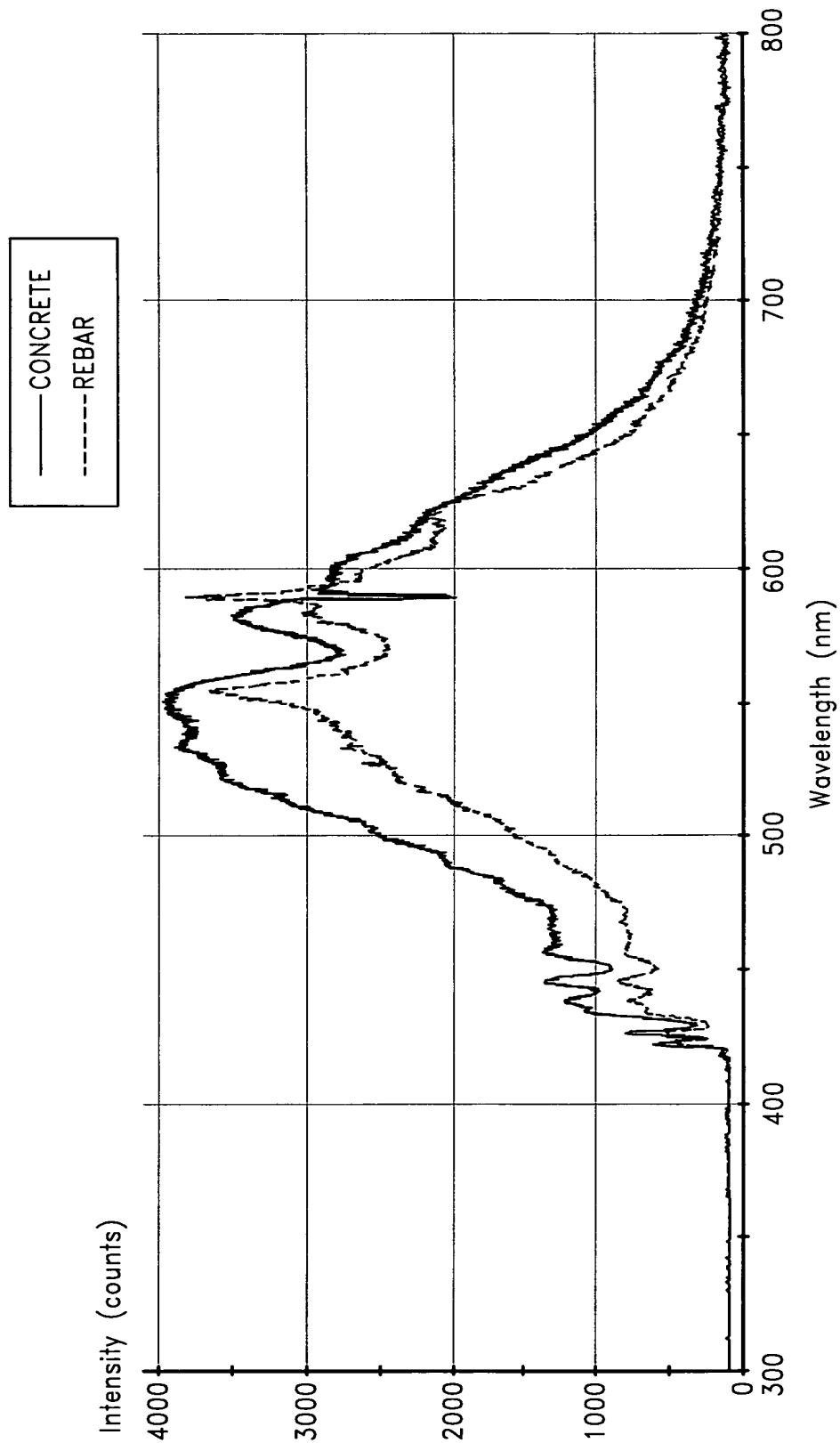


FIG. 19